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To: Examiner Le	From: James Barlow
Fax: 703-746-4175	Pages: 9
Phone:	Date: 2/26/2003
Re: Rule 116 Amendment	CC:
09/816,070	

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

Here is a copy of the after-final amendment I filed on January 30, 2003. A one-month extension-of-time fee was paid. Our office is now disrupted because we are in the process of moving, and it may be difficult for you to reach me by phone. Therefore, I will call you within the next few days to follow up with this fax.

Thank you


James Barlow

Reply under 37 CFR 1.116
Expedited Procedure
Art Unit 2834

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: TORII et al.

Atty. Dkt.: 02-040

Serial No.: 09/816,070

Art Unit: 2834

Filed: 3/26/2001

Examiner: Le

Title: GEARED MOTOR INCLUDING
RIBBED GEAR HOUSING

Assistant Commissioner for Patents

Box AF

Date: 30 January 2003

Washington, DC 20231

CERTIFICATE OF HAND DELIVERY

I hereby certify that this correspondence is being hand delivered to and deposited with the USPTO at the Customer Service Window, Office of Initial Patent Examination, Crystal Plaza Building 2, Room 1B03, 2011 South Clark Place, Arlington, VA 22202 on 30 January 2003
Typed Name: JAMES E. BARLOW.

Signature: 

AMENDMENT UNDER 37 CFR 1.116

Sir:

In response to the Office Action mailed 21 October, 2003, please enter the following amendments and consider the appended remarks.

Please cancel claim 5.

Please replace claims 1, 2, 9 and 10 with the following:

1. (Twice Amended) A geared motor comprising:

a yoke having an opening and receiving a motor unit;

a gear housing made of a resin material, said gear housing covering said opening of said yoke and receiving a worm gear assembly for transmitting a rotational force of said motor unit to an output shaft connected to said worm gear assembly, said worm gear assembly including a worm wheel, said gear housing having a wheel housing segment that receives and rotatably supports said worm wheel, said wheel housing segment having a base wall, said output shaft being connected to said worm wheel and being rotatably received in said base wall of said wheel housing segment such that an axial direction of said output shaft is generally perpendicular to a plane of said base wall of said wheel housing segment; and

a plurality of ribs extending over at least part of an outer surface of said base wall of said wheel housing segment, each one of said plurality of ribs having a lateral thickness that is

Serial No. 09/816,070

measured in a direction perpendicular to said axial direction of said output shaft and that is equal to or smaller than an axial thickness of said base wall of said wheel housing segment measured in said axial direction of said output shaft, wherein:

said worm gear assembly further includes a worm;

said gear housing has a worm housing segment that rotatably receives said worm, and the worm housing segment is located radially outward of the wheel housing segment; and

at least two of said plurality of ribs continuously extend radially to said worm housing segment beyond said base wall of said wheel housing segment.

2. (Amended) A geared motor according to claim 1, wherein:

said wheel housing segment further includes a peripheral wall that generally extends from an outer peripheral edge of said base wall of said wheel housing segment in said axial direction of said output shaft; and

at least one of said plurality of ribs further extends in said axial direction of said output shaft over at least part of an outer peripheral surface of said peripheral wall of said wheel housing segment.

9. (Amended) A geared motor according to claim 1, wherein said at least two of said plurality of ribs extend substantially to an imaginary plane, the imaginary plane extending through a rotational axis of said worm and being parallel with a rotational axis of said worm wheel.

10. (Once Amended) A geared motor housing comprising:

a yoke for housing a motor unit and including an opening;

a resin gear housing covering said opening of said yoke and for housing a worm gear assembly, said resin gear housing having a wheel housing segment for rotatably supporting a worm wheel, said wheel housing segment having a base wall for rotatably receiving an output shaft connected to said worm wheel such that an axial direction of said output shaft is generally perpendicular to a plane of said base wall, said resin gear housing further including a worm housing segment for rotatably receiving a worm gear assembly worm, wherein the worm housing segment is located radially outward of the wheel housing segment; and

a plurality of ribs each extending over at least part of an outer surface of said base wall, at least two of said plurality of ribs continuously extending radially to said worm housing segment beyond said base wall.

Please add new claims 12-18 as follows:

12. (New) The geared motor housing of claim 10, wherein:

said wheel housing segment further includes a peripheral wall that generally extends from an outer peripheral edge of said base wall of said wheel housing segment in said axial direction of said output shaft; and

Serial No. 09/816,070

at least one of said plurality of ribs further extends in said axial direction of said output shaft over at least part of an outer peripheral surface of said peripheral wall of said wheel housing segment.

13. (New) A geared motor according to claim 1, wherein:

said gear housing includes at least two securing portions for securing said gear motor;
and

at least one of said plurality of ribs is positioned between corresponding two of said at least two securing portions.

14. (New) A geared motor according to claim 13, wherein said at least two securing portions are for directly or indirectly securing said gear motor to a vehicle door.

15. (New) A geared motor housing according to claim 10, wherein:

said gear housing includes at least two securing portions for securing said gear motor;
and

at least one of said plurality of ribs is positioned between corresponding two of said at least two securing portions.

16. (New) The geared motor housing according to claim 10, wherein:

the worm is meshed with the worm wheel; and

the wheel housing segment and the worm housing segment are arranged to receive the worm wheel and the worm gear assembly worm, respectively, in a manner such that the rotational axis of the worm wheel is generally perpendicular to the rotational axis of the worm gear assembly worm.

17. (New) The geared motor housing according to claim 1, wherein:

the worm is meshed with the worm wheel; and

the rotational axis of the worm wheel is generally perpendicular to the rotational axis of the worm.

Serial No. 09/816,070

18. (New) A geared motor housing comprising:

a yoke for housing a motor unit and including an opening;

a resin gear housing covering said opening of said yoke and for housing a worm gear assembly, said resin gear housing having a wheel housing segment for rotatably supporting a worm wheel, said wheel housing segment having a base wall for rotatably receiving an output shaft connected to said worm wheel such that an axial direction of said output shaft is generally perpendicular to a plane of said base wall, said resin gear housing further including a worm housing segment for rotatably receiving a worm gear assembly worm; and

a plurality of ribs each extending over at least part of an outer surface of said base wall, at least two of said plurality of ribs continuously extending radially to said worm housing segment beyond said base wall, wherein:

said wheel housing segment further includes a peripheral wall that generally extends from an outer peripheral edge of said base wall of said wheel housing segment in said axial direction of said output shaft; and

at least one of said plurality of ribs further extends in said axial direction of said output shaft over at least part of an outer peripheral surface of said peripheral wall of said wheel housing segment.